Appendix 2: Alternative Fact Sheets

I. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 1

- **ALTERNATIVE NAME:** Rail/Bus

- **ALTERNATIVE DESCRIPTION:** This alternative would provide transit service between Bangor and Bar Harbor using both rail and bus modes. This service would pick up passengers at the airport terminal and at the BGR Intermodal Facility. Bus service would continue to the proposed Brewer station. At this station, passengers would transfer for rail service to Ellsworth. Rolling stock would be commuter rail-type diesel locomotive and coaches. Upon arrival in Ellsworth, passengers would transfer to bus service to Bar Harbor, with an intermediate stop at the BHB Intermodal Facility.

II. OPERATIONS

- **MODE**: Bus and conventional passenger rail (diesel locomotive with passenger coaches)

- **ALIGNMENT**: Under this alternative, the alignment would consist of highway and rail infrastructure. The bus would pick up passengers at the BGR terminal and at BGR Intermodal Facility, then travel east on Hammond Street and use local roadways to serve a proposed Bangor Waterfront Station. The bus would then follow Route 1A southbound to Brewer, stopping at the proposed Brewer station located just south of the junction of I-395 and Route 1A. At this station, passengers would transfer to rail service to Ellsworth.

  The rail segment of Alternative 1 would serve the two proposed stations of Brewer and Ellsworth. The Calais Branch would be utilized to operate train service. At Ellsworth station, passengers would transfer to bus service to Bar Harbor.

  After departing Ellsworth, the bus would travel southbound on Route 3, stopping at the BHB Intermodal Facility, then over Thompson Island, to Mount Desert Island. It would follow Route 3 along the north side of Mount Desert Island to terminate at Main Street ("the Green") in Bar Harbor.

- **CORRIDOR LENGTH:** 51.8 miles

- **SKETCH OPERATING PLAN:** Under this alternative, commuter rail rolling stock was assumed to operate on the rail portion of the alignment. These trains would consist of one rebuilt GP-40 locomotive, one single level Bombardier coach car and one cab control car. For the

segments of the alignment that are served by bus, it was assumed that standard 40' transit buses would be used.

Bus and rail service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

This service will operate 6 round trips per day.

Key operating plan components are displayed in the following bullets:

- **OPERATING SPEED:** The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

  Bus Segment Maximum Operating Speed: 55 MPH
  Bus Segment Average Operating Speed: 45 MPH

  Rail Segment Maximum Operating Speed: 79 MPH
  Rail Segment Average Operating Speed: 42 MPH

- **ONE-WAY TRIP TIME:** The one-way trip time for this alternative was estimated to be 89 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

III. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXSITING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront), at the BHB Intermodal Facility with the Island Explorer, and at Bar Harbor with connections to the Island Explorer (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** At the Bangor Waterfront station a connection to the new, proposed transit service to Orono would be available. A connection to a new, proposed ferry service to Bar Harbor would be available at the BHB Intermodal Facility.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** There would be no impacts to existing freight services. However, a potential impact exists if it were ever decided to operate freight service on the rehabilitated right-of-way.

IV. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists where connections to existing and proposed transportation services occur. At the BGR Intermodal Facility, passengers may transfer to local and intercity bus services. At the BHB Intermodal Facility, it would be possible to connect to the Island Explorer and proposed ferry service to Bar Harbor. At Bar Harbor transfers would be available to the Island Explorer bus and ferry service to Nova Scotia.

- **FARE:** The end-to-end fare is $5.

V. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** Under this alternative, there would probably be limited impacts due to the use of existing highway infrastructure and existing right-of-way. Property owners adjacent to the right-of-way might be affected by the restoration of rail service between Brewer and Ellsworth. However, the existence and extent of any impact would have to be assessed in greater detail in the next phase of study.

  In 1998, the Maine Legislature expressed its interest in restoring rail service this alignment and created the Calais Branch Rail Commission to study the feasibility of reactivating rail service from Calais to Eastport and Brewer. The study concluded that it would be technically feasible to rehabilitate the entire Calais Branch for both passenger and freight rail traffic.

- **LEGAL ISSUES:** It is possible that legal issues may arise if property takings are required or if property owners have encroached upon the railroad right-of-way. At this time it is not known if these conditions exist or to what extent. These issues would have to be analyzed in greater detail in the next phase of the study.

VI. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 2

- **ALTERNATIVE NAME:** Bus

- **ALTERNATIVE DESCRIPTION:** This alternative would provide bus service from Bangor to Bar Harbor, with stops at Brewer, Ellsworth and Trenton. The bus line would operate in mixed traffic on existing roadways within Interstate 395/Route 1A/Route 3 corridor.

VII. OPERATIONS

- **MODE**: Bus

- **ALIGNMENT**: The bus would pick up passengers at the BGR terminal and at the BGR Intermodal Facility, then travel east on Hammond Street and use local roadways to serve a proposed Bangor Waterfront Station. The bus would then follow Route 1A southbound to Brewer, stopping at the proposed Brewer station located just south of the junction of I-395 and Route 1A. Bus service would continue southbound on Route 1A to the Ellsworth station. Next the bus would travel southbound on Route 3 stopping at the proposed BHB Intermodal Facility. After departing the BHB Intermodal Facility, the bus would travel southbound on Route 3, over Thompson Island, and access Mount Desert Island. It would follow Route 3 along the north side of Mount Desert Island to terminate at Main Street ("the Green") in Bar Harbor.

- **CORRIDOR LENGTH:** 49.4 miles

- **SKETCH OPERATING PLAN:** In order to make the bus alternative attractive to potential riders this service will use motorcoach buses. Motorcoach buses are over-the-road buses with luggage storage and are more plush than transit buses. Bicycle racks can be fitted onto these buses for added convenience to potential riders. These coaches generally have a seating capacity of 40 passengers. It is assumed that conventional diesel bus equipment will be used to operate the service. However, alternate fuel technology such as Compressed Natural Gas (CNG) or propane propulsion systems could be used, if preferred.

  Bus service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

  This service will operate 6 round trips per day.

Key operating plan components are displayed in the following bullets:

- **OPERATING SPEED:** The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

  Maximum Operating Speed: 55 MPH
  Average Operating Speed: 45 MPH

- **ONE-WAY TRIP TIME:** The one-way trip time for this alternative was estimated to be 80 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

VIII. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXISTING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront), at the BHB Intermodal Facility with Island Explorer, and at Bar Harbor with connections to the Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** At the Bangor Waterfront station a connection to the new, proposed transit service to Orono would be available. A connection to a new, proposed ferry service to Bar Harbor would be available at the BHB Intermodal Facility.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** There would be no impacts to existing or potential freight services under this alternative.

IX. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists where connections to existing and proposed transportation services occur. At the BGR Intermodal Facility, passengers may transfer to local and intercity bus services. At the BHB Intermodal Facility, it would be possible to transfer to proposed ferry service to Bar Harbor. At Bar Harbor transfers would be available to the Island Explorer bus and ferry service to Nova Scotia.

- **FARE:** The end-to-end fare is $5.

X. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** Under this alternative, there would probably be limited impacts due to the use of existing highway infrastructure. However, the existence and extent of any impact would have to be assessed in greater detail in the next phase of study.

- **LEGAL ISSUES:** None

XI. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 3

- **ALTERNATIVE NAME:** Busway Bypass

- **ALTERNATIVE DESCRIPTION:** This alternative would provide bus service from Bangor to Bar Harbor. The bus would operate in mixed traffic between Bangor and Brewer using existing highway infrastructure. However, between Brewer and Trenton, a bus roadway facility (busway) would be constructed on the Calais Branch and in a new right-of-way between Ellsworth and Trenton. These rights-of-way would be used exclusively for bus service.

XII. OPERATIONS

- **MODE**: Bus

- **ALIGNMENT**: The bus would pick up passengers at the BGR terminal and at the BGR Intermodal Facility, then travel east on Hammond Street and use local roadways to serve a proposed Bangor Waterfront Station. The bus would then follow Route 1A southbound to Brewer, stopping at the proposed Brewer station located just south of the junction of I-395 and Route 1A. After stopping in Brewer, the bus would access the Calais Branch and travel southbound on the proposed busway. Buses would stop at the Ellsworth station. Upon departure, the bus would continue on the busway using the new right-of-way and continue to travel south. The bus would exit the busway to serve the proposed BHB Intermodal Facility. Upon departing the BHB Intermodal Facility, the bus would travel southbound on Route 3 over Thompson Island, and access Mount Desert Island. It would follow Route 3 along the north side of Mount Desert Island to intersection of Main Street in Bar Harbor where the service terminates.

- **CORRIDOR LENGTH:** 52.2 miles

- **SKETCH OPERATING PLAN:** Similar to Alternative 2 Bus, it was assumed that motorcoach buses would be used for this service. Motorcoach buses are more comfortable than transit buses and offer passenger amenities such as luggage storage. Bicycle racks can be fitted onto these buses for added convenience to potential riders. These coaches generally have a seating capacity of 40 passengers. It is assumed that conventional diesel bus equipment will be used to operate the service. However, alternate fuel technology such as Compressed Natural Gas (CNG) or propane propulsion systems could be used, if preferred.

Bus service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

This service will operate 6 round trips per day.

The one-way trip time under this alternative is lower than Alternative 2. This lower one-way time reflects the assumption that the bus will be able to travel faster on the busway than if it operated in mixed traffic as in Alternative 2. To reflect this operating assumption, the average operating speed on the busway segments of the alignment was assumed to be 65 MPH.

Key operating plan components are displayed in the following bullets:

OPERATING SPEED: The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

Maximum Operating Speed (Highway): 55 MPH
Average Operating Speed (Highway): 45 MPH

Maximum Operating Speed (Busway): 65 MPH
Average Operating Speed (Busway): 65 MPH

- **ONE-WAY TRIP TIME:** The one-way trip time for this alternative was estimated to be 65 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

XIII. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXISTING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront), at the BHB Intermodal Facility with Island Explorer, and at Bar Harbor with connections to the Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** At the Bangor Waterfront station a connection to the new, proposed transit service to Orono would be available. A connection to a new, proposed ferry service to Bar Harbor would be available at the BHB Intermodal Facility.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** There would be no impacts to existing freight services. However, if the Calais Branch were converted into a busway, then future

freight service on this segment of the alignment would be impossible, since the right-of-way would contain paved roadways for the bus service.

XIV. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists where connections to existing and proposed transportation services occur. At the BGR Intermodal Facility, passengers may transfer to local and intercity bus services. At the BHB Intermodal Facility, it would be possible to connect to the Island Explorer and proposed ferry service to Bar Harbor. At Bar Harbor transfers would be available to the Island Explorer bus and ferry service to Nova Scotia.

- **FARE:** The end-to-end fare is $5.

XV. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** Under this alternative, there would probably be limited impacts for those segments of the alignment that use existing highway infrastructure and existing right-of-way. However, between Ellsworth and Trenton, a new busway would have to be constructed. The construction of this new busway would likely result in temporary and permanent construction and environmental impacts, including property takings and changes in existing land use. The extent of these impacts would have to be assessed in greater detail in the next phase of study.

- **LEGAL ISSUES:** It is possible that legal issues may arise if property takings are required to construct the new busway between Ellsworth and Trenton, or if property owners have encroached upon the Calais Branch. At this time it is not known if these conditions exist or to what extent. These issues would have to be analyzed in greater detail in the next phase of the study.

XVI. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 4

- **ALTERNATIVE NAME:** Light Rail A

- **ALTERNATIVE DESCRIPTION:** This alternative provides train service between the BGR Intermodal Facility and the BHB Intermodal Facility, with stops at three proposed intermediate stations: Bangor Waterfront, Brewer, and Ellsworth. Rolling stock would be Diesel Multiple Units (DMUs). Bus service would be provided from BHB Intermodal Facility to Bar Harbor.

XVII. OPERATIONS

- **MODE**: Light Rail

- **ALIGNMENT**: The alignment begins at the BGR Intermodal Facility. This alternative assumes use of the GTI right-of-way between the proposed BGR Intermodal Facility, the proposed Bangor Waterfront station and the proposed Brewer Station. Between Brewer and Ellsworth this alternative uses the Calais Branch. This alternative assumes that curves within that existing right-of-way can be straightened to allow higher maximum speeds. Between Ellsworth and Trenton the rail service would continue on new rail right-of-way before terminating at the proposed BHB Intermodal Facility. Passengers would transfer to bus service at the BHB Intermodal Facility. The bus would travel southbound on Route 3 over Thompson Island, and access Mount Desert Island. It would follow Route 3 along the north side of Mount Desert Island to intersection of Main Street in Bar Harbor where the service terminates.

- **CORRIDOR LENGTH:** 51.4 miles

- **SKETCH OPERATING PLAN:** Under this alternative, a connecting bus service would be used to transport passengers from the airport terminal to the BGR Intermodal Facility. Light rail vehicles were assumed to operate on the rail portion of the alignment. The rolling stock would be Diesel Multiple Units (DMUs) similar to those operated by NJ TRANSIT on the Southern New Jersey Light Rail Transit (SNJLRT) system. These trains could consist of two Concept I Articulated DMUs. For the segment between Trenton and Bar Harbor, it was assumed that standard 40' buses would be used to provide bus service.

  This service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

This service will operate 6 round trips per day.

Key operating plan components are displayed in the following bullets:

OPERATING SPEED: The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

Bus Maximum Operating Speed: 55 MPH
Bus Average Operating Speed: 45 MPH

Rail Maximum Operating Speed: 79 MPH
Rail Average Operating Speed: 50MPH

- **ONE-WAY TRIP TIME:** The one-way trip time for this alternative was estimated to be 74 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

XVIII. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXISTING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront), at the BHB Intermodal Facility with Island Explorer, and at Bar Harbor with connections to the Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** At the Bangor Waterfront station a connection to the new, proposed transit service to Orono would be available. A connection to a new, proposed ferry service to Bar Harbor would be available at the BHB Intermodal Facility.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** There would be temporary construction impacts on existing freight service due to the construction of new trackage within the GTI right-of-way for light rail service. A potential impact exists if it were ever decided to operate freight service on the rehabilitated right-of-way. Further, under FRA regulations, conventional rail equipment and light rail vehicles are prohibited from sharing the same track without strict temporal separation and FRA approval. Any potential freight service operations on the Calais Branch would be subject to these regulations.

XIX. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists where connections to existing and proposed transportation services occur. At the BGR Intermodal Facility, passengers may transfer to local and intercity bus services and transit services to Orono. At the BHB Intermodal Facility, it would be possible to connect to the Island Explorer and proposed ferry service to Bar Harbor. At Bar Harbor transfers would be available to the Island Explorer bus and ferry service to Nova Scotia.

- **FARE:** The end-to-end fare is $5.

XX. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** Under this alternative, there would probably be limited impacts in those segments of the alignment that the use existing highway infrastructure and existing right-of-way. The impact due to the straightening of curves within the Calais Branch must be determined. Further, between Ellsworth and Trenton, new rail right-of-way would have to be constructed. The construction of this new rail right-of-way would likely result in temporary and permanent construction and environmental impacts, including property takings and changes in existing land use. The extent of these impacts would have to be assessed in greater detail in the next phase of study.

- **LEGAL ISSUES:** There are operating issues that would have to be resolved if this service shared the same right-of-way with GTI freight service such as the proximity of parallel tracks and shared train control systems. These issues would have to be analyzed in greater detail in the next phase of the study.

  It is possible that legal issues may arise if property takings are required to construct the new rail right-of-way between Ellsworth and Trenton, or if property owners have encroached upon the Calais Branch. At this time it is not known if these conditions exist or to what extent. These issues would have to be analyzed in greater detail in the next phase of the study.

XXI. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 5

- **ALTERNATIVE NAME:** Light Rail B

- **ALTERNATIVE DESCRIPTION:** This alternative would provide train service from BGR Intermodal Facility to BHB Intermodal Facility, with three proposed intermediate stations: Bangor Waterfront, Brewer, and Ellsworth. Rolling stock would be Diesel Multiple Units (DMUs). Bus service would be provided from Trenton to Bar Harbor.

XXII. OPERATIONS

- **MODE**: Diesel Light Rail

- **ALIGNMENT**: This alternative proposes construction of new track within the street right-of-way between the BGR Intermodal Facility and Brewer. The routing in this segment includes Hammond Street to Union Street, across the Chamberlain Bridge to Wilson Street. On Wilson Street, a connection to GTI right-of-way would be made and the train will travel to Brewer. From Brewer station to Ellsworth, the Calais Branch would be used to provide the continuation of rail service. In contrast to Alternative 4, the alignment is not modified to maximize operating speed. Between Ellsworth and BHB Intermodal Facility, the rail service would continue on new rail right-of-way before terminating at the proposed BHB Intermodal Facility. Bus service would be provided from BHB Intermodal Facility to Bar Harbor using Route 3.

- **CORRIDOR LENGTH:** 51.8 miles

- **SKETCH OPERATING PLAN:** A connecting bus service would be used to transport passengers from the airport terminal to the BGR Intermodal Facility. Light rail vehicles were assumed to operate within the proposed street right-of-way between Bangor and Brewer and then on the rail right-of-way segments of the alignment. The rolling stock would be Diesel Multiple Units (DMUs) similar to those operated by NJ TRANSIT on the Southern New Jersey Light Rail Transit (SNJLRT) system. These trains could consist of two Concept I Articulated DMUs. For the segment between BHB Intermodal Facility and Bar Harbor, it was assumed that standard 40' buses would be used to provide bus service.

  This service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

  This service will operate 6 round trips.

Key operating plan components are displayed in the following bullets:

OPERATING SPEED: The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

Bus Maximum Operating Speed: 55 MPH
Bus Average Operating Speed: 45 MPH

Rail Maximum Operating Speed: 79 MPH
Rail Average Operating Speed: 40 MPH

- **TRIP TIME:** The one-way trip time for this alternative was estimated to be 86 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

XXIII. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXISTING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront), at the BHB Intermodal Facility with Island Explorer, and at Bar Harbor with connections to the Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** At the Bangor Waterfront station a connection to the new, proposed transit service to Orono would be available. A connection to a new, proposed ferry service to Bar Harbor would be available at the BHB Intermodal Facility.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** A potential impact exists if it were ever decided to operate freight service on the rehabilitated right-of-way. Further, under FRA regulations, conventional rail equipment and light rail vehicles are prohibited from sharing the same track without strict temporal separation and FRA approval. Any potential freight service operations on the Calais Branch would be subject to these regulations.

XXIV. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists where connections to existing and proposed transportation services occur. At the BGR Intermodal Facility, passengers may transfer to local and intercity bus services. At the BHB Intermodal Facility, it

would be possible to connect to the Island Explorer and proposed ferry service to Bar Harbor. At Bar Harbor transfers would be available to the Island Explorer bus and ferry service to Nova Scotia.

- **FARE:** The end-to-end fare is $5.

XXV. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** Under this alternative, there would likely be temporary and permanent construction and environmental impacts between Bangor and Brewer where right-of-way for street-running service would be constructed and between Ellsworth and Trenton where rail service would require a new rail right-of-way. The construction of rail right-of-way for street running service would likely result in impacts to existing on street parking and pedestrian and traffic flows in Bangor and Brewer. The construction of new rail right-of-way would likely result in property takings and changes in existing land use. The extent of these impacts would have to be assessed in greater detail in the next phase of study.

- **LEGAL ISSUES:** It is possible that legal issues may arise if property takings are required to construct the new rail right-of-way between Bangor and Brewer and between Ellsworth and Trenton, or if property owners have encroached upon the Calais Branch. At this time it is not known if these conditions exist or to what extent. These issues would have to be analyzed in greater detail in the next phase of the study.

XXVI. GENERAL INFORMATION

- **ALTERNATIVE NUMBER:** 6

- **ALTERNATIVE NAME:** Ferry

- **ALTERNATIVE DESCRIPTION:** This alternative proposes operating passenger ferry service between Bangor and Bar Harbor. A connecting bus service would be used to transport passengers from the BGR terminal and the BGR Intermodal Facility to a ferry terminal in Bangor. The ferry route would make use of local waterways for travel between Bangor and Bar Harbor. At Bar Harbor, the ferry service would terminate and connections would be available to Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

XXVII. OPERATIONS

- **MODE**: Ferry

- **ALIGNMENT**: Local waterways would be used to operate ferry service between Bangor and Bar Harbor. The ferry route originates in Bar Harbor and travels south on the Penobscot River to its end, into Eggemoggin Reach. In Eggemoggin Reach, the ferry would travel east around the Brooklin Peninsula into Blue Hill Bay. Once in Blue Hill Bay, the ferry would travel counter-clockwise, past the Cranberry Isles and around Mount Desert Island to terminate in Bar Harbor.

- **CORRIDOR LENGTH:** 83.0 miles

- **SKETCH OPERATING PLAN:** To make ferry service an attractive and competitive mode for potential riders, trip time is an important factor. The selection of a ferry vessel considered several factors including the length of the route and vessel operating speed. Catamaran vessels with an operating speed of 30 knots and a passenger capacity of 250 (all-weather seats) were chosen as the most appropriate vessel for this proposed service. (Catamaran vessels are already in use for the Bay Ferries service from Bar Harbor to Nova Scotia, so this type of technology is not unfamiliar in the region)

  Ferry service will be in operation during the peak summer and fall tourist season beginning on June 1st through October 15th.

  This service will operate 6 round trips.

Key operating plan components are displayed in the following bullets:

OPERATING SPEED: The operating speeds for this alternative by mode are presented below. Maximum Operating Speed represents the highest speed that a vehicle may travel on a section of track or roadway. Average operating speed represents the average speed of a vehicle, taking into account impacts of speed restrictions, traffic signals, traffic, and acceleration/deceleration.

Ferry Maximum Operating Speed: 30 Knots
Ferry Average Operating Speed: 30 Knots

- **TRIP TIME:** Assuming an operating speed of 35 MPH, one-way trip time is 2 hours and 24 minutes. The trip time calculations reflect the distance, operating speed and time required to transfer between modes.

  (Some research was conducted into navigational restrictions/constraints in the waterway, but none were identified at this time, therefore the operating speed was assumed to be unconstrained. It is recommended that this issue should be explored further if this alternative is advanced into the next phase.)

XXVIII. SYSTEM-RELATED PHYSICAL REQUIREMENTS AND OTHER FEATURES

- **CONNECTS WITH EXISTING SERVICES:** Connections to existing transportation services would be available at the BGR Intermodal Facility to "The Bus" (serving downtown Bangor and the Waterfront) and at Bar Harbor with connections to the Island Explorer bus (serving Acadia National Park) and Bay Ferries service to Nova Scotia.

- **CONNECTS WITH PROPOSED NEW SERVICES:** Under this alternative there are no connections with proposed new transportation services.

- **FREIGHT IMPACTS (EXISTING AND/OR POTENTIAL):** Since this alternative does not use any railroad right-of-way there are no impacts any existing or potential freight services.

XXIX. PASSENGER-ORIENTED

- **POTENTIAL FOR TRANSFERS:** The potential for transfers exists in both Bangor and Bar Harbor. In Bangor, connections between the airport to the ferry service to Bar Harbor are possible. In Bar Harbor, disembarking ferry passengers may transfer to the Island Explorer bus service to Acadia National Park or to the ferry service to Nova Scotia offered by Bay Ferries.

- **FARE:** The end-to-end fare is $5.

XXX. POLICY-ORIENTED

- **PUBLIC ACCEPTABILITY:** There is a definite interest in waterborne transportation in the region. The Bay Ferries service between Bar Harbor and Yarmouth, Nova Scotia has been successful in serving its market niche, providing travelers (with and without automobiles) an alternative route to Canada. In the *Maine Strategic Passenger Transportation Plan* (1999), the success of high-speed ferry services was noted and one of the plan's recommendations proposed expanding high-speed ferry services.

- **LEGAL ISSUES:** Under this phase, specific ferry terminal locations were not identified. If this alternative is carried into the next phase, Maine DOT would have to identify locations for a ferry terminal in Bangor. Interim marine highway facilities have been previously identified, among them the Bay Ferries terminal, the town pier, and the Maine State Ferry Service Facilities in Bass Harbor. Further, in the next phase, the sharing of an existing terminal in Bar Harbor should be explored as an option as opposed to constructing a new ferry terminal. If this arrangement was found to be feasible, then memoranda of understanding and operating agreements between the owner of the ferry facility at Bar Harbor and the operator of the Bangor to Bar Harbor ferry would have to be developed.